

WHAT IS CLAIMED IS:

1. A brittleness rating method of rating brittleness of a coating substance for an intended use comprising the steps of:

causing a test film piece formed by laminating a support with a coating substance to produce deformation;

detecting acoustic emissions that said coating substance produces resulting from said deformation of said test film piece; and

rating brittleness of said coating substance on the basis of an outcome of said detection of acoustic emissions.

2. A brittleness rating method of rating brittleness of a coating substance for an intended use as defined in claim 1, wherein said deformation is produced by applying an external load to said test film piece supported at opposite sides in a transverse direction of said test film piece at a middle between said opposite sides by compressive means.

3. A brittleness rating method of rating brittleness of a coating substance for an intended use as defined in claim 2, wherein said external load is applied to said test film piece by said compression head descending at a constant speed.

4. A brittleness rating method of rating brittleness of a coating substance for an intended use as defined in claim 1, wherein said acoustic emissions are detected by an acoustic emission sensor attached to said test film piece.

5. A brittleness rating method of rating brittleness of a coating substance for an

intended use as defined in claim 1, wherein brittleness of said coating substance is rated on the basis of said deformation at said detection of a first acoustic emission.

6. A brittleness rating method of rating brittleness of a coating substance for an intended use as defined in claim 3, wherein brittleness of said coating substance is rated as qualified for an electrophotographic image receiving film in the event that a distance of descent of said compression head is greater than 2 mm at detection of a first one of said acoustic emissions when said test film piece is supported at opposite sides separated at a distance of 50 mm in a transverse direction of said test film piece.

7. A brittleness rating device for rating brittleness of a coating substance for an intended use which uses a test film piece prepared by laminating a support with said coating substance, said brittleness rating equipment comprising:

deforming means for causing said test film piece to produce deformation by applying an external load to said test film piece supported at opposite sides in a transverse direction of said test film piece at a middle between said opposite sides by compressive means;

acoustic emission detecting means for detecting acoustic emissions that said coating substance produces resulting from said deformation of said test film piece, said acoustic emission detecting means being detachably attached to said test film piece; and

rating means for rating brittleness of said coating substance on the basis of an output from said acoustic emission detecting means.

8. A brittleness rating device for rating brittleness of a coating substance for an intended use as defined in claim 7, wherein said deforming means comprises a compressive

transverse test device having two supporting wedges for supporting said test film piece at opposite sides in a transverse direction of said test film piece and a compressive head for applying an external load to said test film piece at a middle between said opposite sides.

9. A brittleness rating device for rating brittleness of a coating substance for an intended use as defined in claim 8, wherein said compressive head descends at a constant speed.